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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,986	11/05/2001	Martin Geiger	4452-444	7664

7590

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EXAMINER

NGUYEN, TRAN N

ART UNIT PAPER NUMBER

2834

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,986

Applicant(s)

GEIGER ET AL.

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4-5. 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, "surfaces comprise straight lines which are slewed with respect to said drive shaft" is indefinite because the surfaces (of the stator and the rotor) do not have any straight lines thereon, but rather the surfaces can be drawn with geometrical lines thereon. Furthermore, the term "straight lines" seems to contradict with the term "slew" (i.e., curved). In light of the spec., the above recitation is understood as "surfaces with imaginary geometrically drawn lines being slewed with respect to said drive shaft".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-2 and 4** are rejected under 35 U.S.C. 102(b) as being fully anticipated by Laing (GB 2182808).

Laing discloses a drive unit comprising:

A housing;

A drive shaft assembly (13, 14) mounted for rotation in the housing;

A stator assembly (28, 25) having a surface forming a boundary of an air gap;

A rotor (3) coaxial to the stator and in wobbling-motion torque transmitting with the shaft assembly; the rotor having a surface forming a boundary of the air gap, the surfaces approximating a slewing curve in cross section parallel to the shaft assembly.

3. **Claims 1-2 and 4** are rejected under 35 U.S.C. 102(b) as being fully anticipated by Laing (US 3723029).

Laing discloses a drive unit comprising:

A housing;

A drive shaft mounted for rotation in the housing;

A stator having a surface forming a boundary of an air gap;

A rotor coaxial to the stator and in wobbling-motion torque transmitting with the shaft assembly; the rotor having a surface forming a boundary of the air gap, the surfaces approximating a slewing curve in cross section parallel to the shaft assembly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Laing (either GB or US patents) in view of Hintz (US 4330725).

Laing discloses the claimed invention, except for the stator core comprises a stack of plates of mutually different shapes.

Hintz, however, teaches the stator core having a stack of plates of mutually different shapes (fig 1) in order to form a slant air gap between the rotor and the stator. The important teaching of Hintz is that a stator core can be formed by mutually different shapes of laminated core plate in order to configure the stator core with a specific designed overall core shape.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the Laing drive unit by embodying the stator core having a stack of plates of mutually different shapes, as taught by Hintz. Doing so would enable the stator core to be a designed configuration of the overall core.

5. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Laing (either GB or US patent) , as applied in the rejection against the base claim, and in view of level of ordinary skills of a worker in the art.

The Laing discloses the claimed invention, except for the added limitations of the slewing curve is a second-order curve.

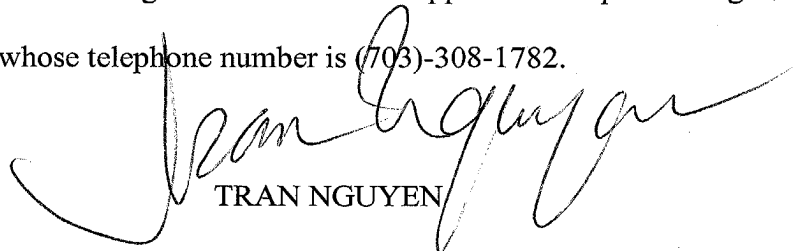
Lang's drive unit has slewing curve, those skills in the art would realize that to configure the slewing curve to be a second-order curve because a change in size or shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955) (emphasis added).

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.


TRAN NGUYEN
PRIMARY PATENT EXAMINER